

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An isolated RNA comprising an artificial intron RNA that is released in a cell, thereby ~~modulating~~ silencing the function of a target gene.
2. (Currently amended) The isolated RNA of claim 1, wherein the isolated artificial intron RNA contains a splice donor site ~~that includes 5'-GUA(A/-)GAG(G/U)-3'~~, a splice acceptor site ~~that includes 5'-G(A/U/-)(U/G)(C/G)C(U/C)(G/A)CAG-3' (SEQ ID NO: 1)~~, a branch site ~~that includes 5'-UACU(A/U)A(C/U)(-/C)-3'~~, and a poly-pyrimidine tract ~~that includes 5'-(U(C/U))₁₋₃(C/-)U₇₋₁₂C(C/-)-3' (SEQ ID NO: 2)~~, or a combination thereof.
3. (Currently amended) The isolated RNA of claim ~~[[2]]~~ 1, wherein the cell is a mammalian cell.
4. (Currently amended) The isolated artificial intron RNA of claim 2, wherein the splice donor site contains 5'-AGGUAAGU-3'.
5. (Currently amended) The isolated artificial intron RNA of claim 2, wherein the splice acceptor site contains 5'-CCACAGC-3'.
6. (Currently amended) The isolated artificial intron RNA of claim 2, wherein the branch site contains 5'-UACUAAC-3'.

7. (Currently amended) An isolated RNA comprising an artificial intron RNA that is released in a ~~mammalian~~ eukaryotic cell, thereby ~~modulating~~ silencing the function of a target gene.
8. (Currently amended) An isolated RNA comprising an artificial intron RNA that is released in a ~~mammalian~~ eukaryotic cell, thereby ~~modulating~~ silencing the function of a target gene, wherein the ~~isolated~~ artificial intron RNA contains a splice donor site that includes 5'-GUA(A/-)GAG(G/U)-3' 5'-AGGUAAGU-3', a splice acceptor site that includes 5'-G(A/U/-)(U/G)(C/G)C(U/C)(G/A)CAG-3' (SEQ ID NO: 1) 5'-CCACAGC-3', a branch site that includes 5'-UACU(A/U)A(C/U)(/C)-3' 5'-UACUAAC-3', a poly-pyrimidine tract that includes 5'-(U(C/U))₁₋₃(C/-)U₇₋₁₂C(C/-)-3' (SEQ ID NO: 2) 5'-UUCUUUUUUUU-3', or a combination thereof.
- 9-10. (Canceled)
11. (Original) A cultivated cell comprising the isolated RNA of claim 1.
- 12-18. (Canceled)
19. (Original) A composition comprising the isolated RNA of claim 1.
- 20-57. (Canceled)